Jay Nixon, Governor Sara Parker Pauley, Director

Solid Waste Management Program

Site Background - Bridgeton Sanitary Landfill

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Bridgeton Sanitary Landfill, from here forward referred to as Bridgeton, is currently owned by Bridgeton Landfill LLC, and is a subsidiary of Republic Services Inc., from here forward referred to as Republic. The landfill waste mass encompasses approximately 52 acres with approximately 240 feet below the ground's surface and a total waste thickness of 320 feet. The waste is located in two distinct areas known as the North and South Quarries. Bridgeton was initially permitted on Nov. 18, 1985 and ceased accepting waste on Dec. 31, 2004.

On Dec. 23, 2010, Bridgeton/Republic reported the landfill was experiencing elevated temperatures on some gas extraction wells. The facility began testing landfill gas from the gas extraction system and found elevated hydrogen and carbon monoxide and reduced methane concentrations, which is indicative of a subsurface smoldering event. The Solid Waste Management Program has been meeting with Bridgeton/Republic staff and facility consultants to gather and analyze data and information concerning the elevated temperatures at the landfill.

Note: Subsurface smoldering event or fire -- These reactions occur more slowly without a visible flame or quantities of smoke and may be deep within the landfill. Normally, an actual flame will not be observed. The only time this type of event or fire results in a visible flame or smoke is when the subsurface event or fire is excavated and exposed to the atmosphere.

The Solid Waste Management Program tasked the facility owner with researching, designing and implementing actions to isolate the area with elevated temperatures in order to prevent expansion of the subsurface smoldering event. By Spring 2011, Bridgeton/Republic began implementing a series of corrective actions to address the increased temperatures. Through winter 2011, subsidence levels at the landfill remained within the normally expected range for decomposing waste at depth and gas extraction wells continued to show elevated temperatures.

In early spring 2012, subsidence levels began to exceed those expected levels and an increase in odors was noticed with some odor complaints being filed by nearby residents and businesses. The Solid Waste Management Program contracted with landfill fire technical experts who assisted in confirming the presence of a subsurface smoldering event at Bridgeton through physical observations of the landfill and data analyses. On July 23, 2012, the Solid Waste Management Program issued Bridgeton a notice of violation for 1,0 conditions associated with the subsurface smoldering event. 0714 40422691

http://dnr.mo.gov/env/swmp/facilities/BridgetonSanitaryLandfill-Background.htm

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